

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

Claims 1 - 6 (cancelled).

7. (previously presented) A method for producing a free-flowing granular material comprising the steps of providing a pumice having a size in the range of from about 500 μ to about 15 mm, mixing the pumice with water, separating the water from the pumice and drying the pumice to form dried pumice, combining one part by weight of sludge from a biological treatment of municipal or industrial waste water with from about 0.5 to about 0.9 part by weight of the dried pumice to form the free-flowing granular material comprising granules of the combined sludge and dried pumice.

8. (previously presented) The method of claim 7, further including the step of adding from about 5% to about 12% by weight of clay to the combined sludge and dried pumice based on the weight of the total mixture.

9. (previously presented) The method of claim 7, further including adding up to about 1% by weight of water retainer.

10. (previously presented) The method of claim 7, further including adding up to about 1% by weight of potassium polysilicate based on the weight of the total mixture.

11. (previously presented) The method of claim 7, wherein the step of mixing the pumice with water includes spraying waterjets through a screen on which the pumice is supported.

12. (previously presented) A method for producing a free-flowing granular material comprising the steps of providing a pumice having a size in the range of from about 500 mu to about 15 mm and a porous structure including pores, cleaning said pumice to remove debris contained in said pores, combining one part by weight of sludge from a biological treatment of municipal or industrial waste water with from about 0.5 to about 0.9 part by weight of the pumice to form the free-flowing granular material comprising granules of the combined sludge and dried pumice.

13. (previously presented) A granular free-flowing material having a maximum dimension between about 0.5 mm and 15 mm and the following elemental analysis by weight:

H₂O, 45% to 60%;

Si, expressed as SiO₂, 22% to 25%;

Al, expressed as Al₂O₃, 6% to 9%;

C, 4% to 5%; and

Organic matter (loss on ignition), 1% to 3%.

14. (currently amended) A method of forming a cultural substrate comprising the steps of providing a material in accordance with claim [5] 12, depositing the material along a surface to form a cultural substrate.